

# MAHAICA-ROSIGNOL ROAD REHABILITATION PROJECT

(GY-0056)

## EXECUTIVE SUMMARY

<b>Borrower and Guarantor:</b>	The Government of the Cooperative Republic of Guyana (GOG)		
<b>Executing Agency:</b>	Ministry of Public Works and Communications (MPW&C)		
<b>Amount and Source:</b>	IDB: (FSO) in foreign currency)	US\$	33,000,000
	Local counterpart funding:	US\$	7,000,000
	Total:	US\$	40,000,000
<b>Financial Terms and Conditions:</b>	Amortization period:	40 years	
	Grace period:	10 years	
	Execution period:	48 months	
	Disbursement period:	60 months	
	Interest Rate:	1% during grace period	
		2% thereafter	
	Inspection and Supervision:	1%	
	Credit fee:	0.5%	
<b>Objectives:</b>	<p>The <b>general objective</b> of the project is to increase competitiveness by reducing vehicle-operating costs and improving traffic safety. The <b>specific objectives</b> of the proposed project are:</p> <p>• To increase the efficiency and effectiveness of the Ministry of Public Works and Communications (MPW&amp;C) to plan for infrastructure investments and maintenance and to increase its capacity to contract with the private sector for the execution of civil works</p>		

- ✍✍ To implement a Weight Control Program to reduce the damage caused by overweight vehicles to the road network
- ✍✍ To rehabilitate the 42 miles of road between Mahaica and Rosignol
- ✍✍ To determine the feasibility of activities to improve the southern access to the city of Georgetown and to rehabilitate the New Amsterdam to Crabwood Creek Road and associated rural roads.

**Description:**

The Project consists of four components: (1) institutional strengthening of the Ministry of Public Works and Communications (MPW&C); (2) implementation of weight control program; (3) rehabilitation of the Mahaica-Rosignol road segment; and (4) feasibility and design studies of southern approaches to Georgetown.

**(1) Institutional Strengthening of the Ministry of Public Works and Communications (MPW&C) (US\$7.6 million)**

The MPW&C has created the Work Services Group (WSG) to design and implement all contracts for investment and maintenance of roads, bridges, and sea defenses. The WSG will also be responsible for investment, maintenance and planning of public works. The staff of the WSG will receive competitive salaries. The Bank loan will finance technical assistance, training and computer equipment for the WSG. The GOG will finance all investment and recurrent costs needed for establishing the WSG plus increased funding for maintenance of the road network

**(2) Weight Control Program (US\$0.4 million)**

The implementation of a weight control program (WCP) was halted in 1997 after the portable scales being used became inoperable. The MPW&C requested the Bank's assistance to re-establish the WCP to safeguard the road investments being made. The Project will finance the design of a WCP and the establishment of six permanent weight stations.

**(3) Rehabilitation of the Mahaica-Rosignol Road Segment (US\$24.0 million)**

The main objective of this component is to reduce road user costs

by improving riding quality and highway safety through rehabilitation works. The proposed road rehabilitation works include pavement and shoulder strengthening and widening, improvement of drainage works, construction of curbs, sidewalks, parking lanes in priority areas, and installation of traffic signs and pavement markings and road lighting and other safety elements. The estimated direct costs of the road improvements are US\$21.5 million, of which about US\$6.0 millions will be used to improve highway safety. The Project will also fund the services of an engineering consulting firm that will supervise the civil works.

#### **(4) Feasibility and Design Studies (US\$ 3.2 million)**

The Project will finance feasibility studies for investments to improve the southern access to the city of Georgetown and for rehabilitation of the New Amsterdam to Crabwood Creek Road. The Project will also finance the detailed designs and the preparation of bidding documents for feasible and affordable solutions.

#### **Environmental/ Social Impact:**

The Project will have a positive socio-economic impact upon the rural poor of Guyana, who rank among the poorest in the hemisphere, as the road traverses an eminently agricultural region and is the main source of market access for agricultural producers. Negative impacts will be mainly related to rehabilitation activities and are expected to be temporary, of small magnitude and localized to civil work areas. These negative impacts can be avoided or mitigated through efficient application of environmental management, specifications for which will be included in the construction contracts. An Environmental Impact Assessment (EIA) was prepared with extensive consultation with governmental agencies and the general public. The draft EIA was released to the public in October 2000, and discussed in a public meeting on April 22, 2001. The issues of most importance raising during the public hearing were those regarding safety, control of speeders and drainage. As a result of the consultation process, US\$6 million will be used to enhance safety along the road. A full Environmental Management Plan (EMP) has been prepared and presented by the Ministry to the Environmental Protection Agency, in compliance with environmental laws. The EMP will be considered a contractual requirement for contractors. The CESI, at its meeting of November 10, 2000 and July 6, 2001, reviewed the Project and its recommendations are included in this Report.

**Benefits:**

The strengthening of the MPW&C through the establishment of the WSG is expected rationalize public resource use for roads, bridges and sea defenses, and will establish a model that could be used for the modernization of other public sector entities. Infrastructure maintenance, road safety and environmental management are expected to improve. The implementation of the weight control program is expected to contribute to lower road maintenance costs.

The economic benefits of the rehabilitation of the Mahaica-Rosignol Road were evaluated using the HDM-4 model. The IRR was estimated at 33% and the NPV at US\$29 million. These results exclude the benefits that are expected to result from increased highway safety expenditures. These results are quite robust. For example, with cost increases of 100%, the IRR would be reduced to 16% and the NPV would be US\$9 million.

The benefits that would result from the feasibility studies can not be estimated *a priori*. However, analysis of traffic flows indicates that an improvement of the Southern approach to Georgetown and the rehabilitation of the New Amsterdam to Crabwood Creek road would have adequate IRRs.

**Risks:**

The **main risks** are:

- ⚡ lack of a strong project management capability in the MPW&C
- ⚡ inadequate road maintenance
- ⚡ inability of the MPW&C to monitor contractors adequately
- ⚡ cost overruns
- ⚡ delays in the initiation of the project

**Risk mitigation** measures proposed include:

- ⚡ establishing and strengthening of the WSG
- ⚡ improving the system to rationalize maintenance (financed under the Bridges Rehabilitation Program) and a commitment to double maintenance expenditures over a period of four years.
- ⚡ Including a 3-year maintenance contract within the rehabilitation works, and implementation of an RMMS on 200 miles of main roads.
- ⚡ hiring an engineering supervision firm using ICB procedures

using lump sum contracts for the civil works.

using C&D funds and funds from on-going projects to support actions related to Project implementation before the Loan Contract is signed.

**The Bank's and  
the Country  
Strategy:**

The Bank strategy in the road sector, as reflected in the 1998 Country Paper, is to rehabilitate, maintain and complete critical components of the road network in order to reduce transportation costs, and thus promote national integration and economic growth. The Programming Mission of November 2000 included the Mahaica-Rosignol Road in the 2001-A project pipeline, thus reiterating the priority of rehabilitating this critical road. During the Programming Mission, the Bank agreed to consider the financing of feasibility studies of the Southern Approach to Georgetown and of the New Amsterdam to Crabwood Creek Road. In terms of modernization of the public sector, the Bank supports actions designed to increase the efficiency and effectiveness of public sector institutions, particularly by outsourcing the execution of works.

**Special  
Contractual  
Conditions:**

To ensure proper Project execution the special conditions below are proposed:

1. Prior to first disbursement of the resources of the loan, the Executing Agency shall present for the Bank's approval evidence that Work Services Group (WSG): a) is fully staffed; b) has established a financial management system to carry out the Project activities; and c) has a budget which includes the counterpart funds for the Project for the first year. Paragraph 3.5
2. Prior to the pre-qualification of the civil works contractor the Executing Agency shall hire the Engineering Supervisory firm for the Civil Works Component." 3.10
3. Prior to the first disbursement of loan resources for the civil works component, the Executing Agency shall provide evidence to the Bank that it has hired: a) a senior international advisor to the WSG and b) a consulting firm to establish the Routine Maintenance Management System (RMMS). Paragraph 2.10.

**Procurement:**

The threshold above which procurement will be subject to ICB is US\$350,000 for goods and US\$1,000,000 for civil works. All Bank-financed civil works (rehabilitation of the Mahaica-Rosignol road) will be let in one package to pre-qualified firms.

<b>SEQ/PTI:</b>	This operation qualifies as a social equity-enhancing project, as described in the indicative targets mandated by the Bank's Eighth Replenishment (Document AB-1704). Furthermore, this operation qualifies as Poverty Targeted Investment (PTI) (See paragraphs 2.5 and 2.6). The borrowing country will be using two percentage points in additional financing.
<b>Exceptions to Bank Policies:</b>	None